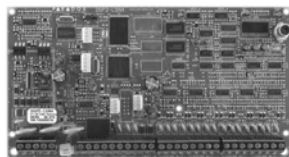


DIGI PLEX EVO



Listen-In Module
DGP-LSN4 V1.1

Installation



paradox.com
PRINTED IN CANADA - 10/2006
DGPLSN4-EI01

Technical Specifications

Power Input:	11 to 14V DC 60mA Max. (Without Substations.)
Siren Control Relay:	Form C Relay Rated @ 125V 5A Receptive Load.
Substations:	4 independant Substation Connections
Locate Indicator:	Green LED Flashing Rapidly
Combustion Fault Indicator:	Red and Green LED Flashing Alternately
Power Indication:	Red LED flashes once per second.
Phone Line Indication:	Red LED Near Phone Connectors Lights Up when the Line is Used by the Listen-In.
Tamper Input:	Yes. Connect N.O. Switch
Compatibility:	Any EVO96 Control Panel
Auxiliary Output:	Same as Power Input
Audio Quality:	22 Khz, 16 Bits (22 Khz, 8 Bits if the DGP-LSN4 is using the phone line). High Noise Immunity (Differential Audio)

Specifications may change without prior notice.

Listen-In Module Overview

The Listen-In module is a multipurpose communication module that depends on the use of Substations to reach its full potential. Here are some of the terms used with the DGP-LSN4 module:

- Response Connection**
 A function that allows a monitoring station to connect to the module after the alarm is sent, but without hanging up and calling the module.
- Call-Back Connection**
 A function that allows a monitoring station to connect by calling the module after an alarm is sent.
- Primary Substation**
 A substation with access to all the functions. You can have up to 4 primary substations on the Listen-In module.
- Secondary Substation**
 A substation that is used as an output only. Its status is dependant on the status of the primary substation to which it is connected. You can have up to 8 secondary substations on the Listen-In module.

Connection

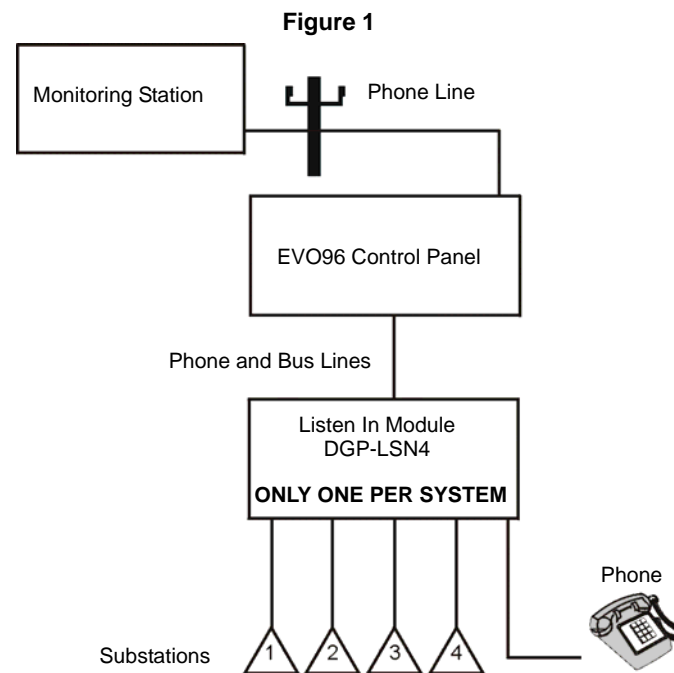
Connect the Listen-In module as detailed in Figure 2. We recommend using a dedicated external power supply (DGP2-PS17 or PS-817). It is possible to use the combus power supply (without an external power supply), but due to the

power consumption of the DGP-LSN4 the number of modules you can connect on the control panel will be reduced. If using the combus power supply, the Listen-In module needs to be installed within 10m (33ft.) of the control panel. When connecting a phone line to the system, first connect it to the control panel (EVO96) and then the Listen-In module (DGP-LSN4).

! Please note that the Listen-In module requires a minimum of 11 volts to function properly. To ensure that voltage does not drop under that level during battery tests, make sure that a back-up battery is properly connected to the power supply.

In order to communicate with the Listen-In module from an external phone line, you will need to set the control panel's ring counter to 000 (OFF) or higher than the Listen-In module's ring counter and the control panel's answering machine override to 000 (OFF).

Connect the substations with wiring no longer than 152m (500ft.). We recommend using CAT-5 cable (4 twisted pairs.) Refer to the DGP-SUB1 installation guide for additional information. Options referring to specific substations will affect the primary substation connected on that port.



Programming Sections

Program the following sections through a system keypad or the WinLoad Installer Upload/Download software V2.90 or higher:

Listen-In Module Settings

Continuous Recording

Section [005]: Option [4]

Default: Disabled

Continuous recording allows the listen-in module to constantly record on all four substations. When enabled, the Listen-In module will save the recording from a period of time programmed in section [035] and [036]. This recording can then be played back while connected (Monitoring Menu: Level 0, option [5] or User Menu: Listen-In menu, option [6]; see DGP-LSN4 User Guide) by the monitoring station or a user with proper access (see *User Connection Access*).

! If option [4] and [5] from section [005] are enabled, the siren will be bypassed during the post alarm recording period and no messages will be played on the substations.

Pre-Alarm Audio Recording

Section [035]

Default: 015

This setting defines the duration of the audio recording prior to the alarm that will be saved. It can be set from 5 to 115 seconds.

Post-Alarm Audio Recording

Section [036]

Default: 015

This setting defines the duration of the audio recording following the alarm that will be saved. It can be set from 5 to 115 seconds.

! The total duration of the audio recording cannot be higher than 120 seconds. Section [035] and [036]'s values have to be lower than 120 when added together. Section [035] has priority and if a time entered in it would cause the recording time to go over 120 seconds, section [036] will be adjusted. If a time entered in section [036] would cause the time to exceed 120 seconds, it will be rejected.

Bypass Siren on Communication

Section [005]: Option [5]

Default: Enabled

When enabled, if the monitoring station or a user with access (see *User Connection Access*) enters any Communication mode, the siren will be silenced. Please note that the siren must be connected through the Listen-in module for this feature to function. For hardwire connections see Figure 2.

! If this option is disabled, the siren can prevent the monitoring station/user from effectively assessing the alarm situation while listening. The siren can be controlled manually through the connection levels.

Audio Message Options

Sections [015]: Options [1] to [8]

Sections [016]: Options [1] to [8]

Use sections [015] and [016] to select the pre-recorded message for various actions as detailed in Table 1. Every option other than section [016] options [6], [7] and [8] will allow the user to deactivate a message completely on the substations. For section [016] options 6 to 8, disabling these options will replace the message by a beep during telephone communications.

Table 1: Audio Message Options

Section	Option	Default	Message
[015]	[1]	ON	Exit delay audio message
	[2]	ON	Armed audio message
	[3]	ON	Disarmed audio message
	[4]	ON	Entry delay audio message
	[5]	OFF	Welcome audio message
	[6]	OFF	Goodbye audio message
	[7]	OFF	System trouble audio message
	[8]	OFF	Installer in/out audio message
[016]	[1]	OFF	Background music on/off audio message
	[2]	OFF	Personal recording start/end audio message
	[3]	OFF	Play "armed" messages on Stay/Instant arming
	[4]	OFF	Listen-in on/off audio message
	[5]	N/A	Future use
	[6]	VOICE	New alarm message (alarm in same partition)
	[7]	VOICE	New alarm report message (alarm in other partition)
	[8]	VOICE	To begin, enter account code message

Personalized User and Partition Audio Labels

Section [017] to [019]: Options [1] to [8]

Default: Default Labels

These sections allows to set which label is used between the default prerecorded label or the personalized label. Section [017] affects partitions audio labels, section [018] affects users 1 through 8 audio labels. See Table 2 for Section [019]. Enabling the options causes the system to use the personalized audio labels for that user or area. To create or modify a personal label, press and hold the mute button for 5 seconds. These settings can be changed later by the user in the personal message recording mode.

Table 2: Audio Message Options (Section [019])

Option	Default	Message
[1]	OFF	System audio label
[2]	OFF	Alarm message
[3]	OFF	Fire alarm message

Background Music Input

Section [006]: Options [5]

Default: Disabled

Option [5] activates or deactivate the Background Music Input. If enabled, pressing the mute button will toggle the music on and off as well as muting and unmuting the substation, if disabled, the mute button will only mute and unmute the substation.

Volume Bypass

Section [005]: Option [3]

Default: Enabled

When enabled, if a panic or alarm is generated, the Substation's panic/alarm message will play at full volume regardless of the set volume level of the Substation. When disabled, the volume of the panic/alarm message will remain at the same volume that is set with the volume dial on the Substation.

Connection Message Repeat Delay

Section [030]

Default: 030

This setting defines the time before the Connection message, which warns users that someone connected to the system in Listen-In or Two-Way communications is repeated. It can be set from 5 to 255 seconds.

! The connection message is not played in the case of a silent or report only alarm.

Alarm Message Repeat Delay

Section [031]

Default: 020

This setting defines the time before the Alarm message is repeated. It can be set from 5 to 255 seconds.

Fire Alarm Message Repeat Delay

Section [032]

Default: 020

This setting defines the time before the Fire Alarm message is repeated. It can be set from 5 to 255 seconds.

Listen-In Module's Tamper Input

Section [005]: Option [1]

Default: Disabled

When enabled, the Listen-In module's tamper input (TMP) is activated. The Listen-In module does not feature a built-in anti-tamper switch, it has a tamper input that allows the connection of an external anti-tamper switch. Connect the external anti-tamper switch as detailed in Figure 2.

Substation Anti-Tamper Switch Options

Section [006]: Options [1] to [4]

Default: Disabled

Options [1] to [4] represent the anti-tamper switches for Substations 1 to 4 respectively. Enable or disable the anti-tamper switch on each substation. If a Substation's anti-tamper switch is enabled and is activated, it generates the same trouble as the Listen-In module's tamper input.

Telephone Line Monitoring (TLM)

Section [005]: Option [2]

Default: Disabled

When enabled, the Listen-In module verifies the existence of a telephone line once every second. A line test failure occurs when the TLM detects less than 3V for the period defined by the TLM Fail Timer (see *TLM Fail Timer*). If the line test fails, the Listen-In module will generate a module TLM trouble in the control panel, until the Listen-In module detects the telephone line again.

TLM Fail Timer

Section [027]

Default: 030

This section sets the delay before a trouble signal is sent to the control panel if there is a problem with the Telephone Line Monitoring. Default is 30 seconds but it can be set between 000 (instant) and 255 seconds. (See Telephone Line Monitoring for additional informations.)

Locate Feedback on Substations

Section [005]: Option [6]

Default: Disabled

When enabled, if there is a Locate request for the Listen-In module, the Page LED on each Substation will flash rapidly (2 flashes/second). The Page LED will stop flashing after 30 minutes, until there is another Locate request or a reset request for the Listen-In module, or if the power is manually removed.

! If a Substation is in Paging or Mute mode, the Page LED will not flash when a Locate request is made.


Substation Settings

Substation Partition Assignment

Sections [001] to [004]: Options [1] to [8]

Default: Options [1] to [8] = Enabled

Each of the four Substations can be assigned to up to 8 partitions. Sections [001] to [004] represent Substations 1 to 4, and options [1] to [8] represent partitions 1 to 8 respectively. When a panic is generated on a Substation, every partition assigned to the Substation will generate an alarm. When an alarm is generated, you will be able to listen from and speak into the Substation(s) assigned to the partition(s) in alarm. If a substation is not assigned to any partitions, the Panic button will not function on that Substation. Also, it will not be accessible for the Listen-In and Two-Way Communication modes.

 *At least one Substation must be assigned to at least one partition to use all the options available.*

Substation Partition Status

Sections [020] to [023]: Options [1] to [8]

Default: [1] to [8] = Enabled

When a partition status change occurs in the system, this feature defines which substations will play the status change message. Sections [020] to [023] represent substations 1 to 4, and options [1] to [8] represent partitions 1 to 8 respectively. To hear a partition's status on a substation, enable the option corresponding to the partition. Each of the four substations can play status messages of up to 8 partitions. The partition does not have to be assigned to a substation in order for it to play the partition's status change message.

Substation Panic Button Options

Section [013]: Options [1] to [8]

Default: Disabled

This option defines the type of panic (Police, Medical, or Fire) linked to the substation's panic button. Each substation can only be linked to one type of panic. They have to be enabled both in the module and in the control panel to function.

Substation Panic Audible Feedback

Section [014]: Options [1] to [4]

Default: Disabled

With this option enabled and the Substation Panic Button Options (section [013]) defined, when the panic button is pressed and held for 2 seconds or more, you will hear a message on the substation informing that a Panic has been generated even if that option was not enabled in the control panel.

Substation 1 to 4 Page Options

Section [009] to [012]: Options [1] to [4]

Default: Enabled

These options allow to enable or disable paging from a substation to other substations. Under default settings, you page all three other substations. If all three substation options are disabled on one substation, you will not be able to page from that substation. For example, for substation 1 (section [009]), you will be able to activate and deactivate options [2], [3], and [4].

Mute Schedule

Section [038] to [041]

These options allow to automatically mute a specific substation according to a schedule. Section [038] is used for Substation 1, Section [039] is used for Substation 2, Section [040] is used for Substation 3 and Section [041] is used for Substation 4. Holidays are determined in the EVO panel's programming.

Table 3: Mute Schedules

	Start Time	End Time	Days (1 to 8)
Schedule A	___ : ___	___ : ___	S M T W T F S H
Schedule B	___ : ___	___ : ___	S M T W T F S H

Connection Settings

Connection Options

Section [007]: Options [1] to [8]

Section [008]: Options [1] to [5]

Sections [007] and [008] define which events will enable a Response or a Call-Back Connection (see *Listen-In Module Overview*). In sections [007] and [008], enable the option(s) corresponding to the event(s) that will enable the connection. See to see which events can start Response and Call-Back Connections.

Table 4: Connection Options

Section	Option	Event	Details
[007]	[1]	Zone Alarm	(default = Enabled) A zone opens while the system is armed
	[2]	Fire Alarm	(default = Enabled)
	[3]	Duress Alarm	(default = Enabled) User enters duress code
	[4]	Emergency Panic	(default = Enabled)
	[5]	Medical Panic	(default = Enabled)
	[6]	Fire Panic	(default = Enabled)
	[7]	Zone Tamper	(default = Disabled)
	[8]	Zone Supervision	(default = Disabled)
[008]	[1]	Zone Fire Loop Trouble	(default = Disabled)
	[2]	Module Tamper	(default = Disabled)
	[3]	Door Force Alarm	(default = Disabled) A protected door is opened without proper authorization
	[4]	Bus Fault	(default = Disabled)
	[5]	Police Code	(default = Disabled)

Response Connection Code Entry Delay

Section [033]

Default: 020


This setting defines the time allowed to enter the Response Connection Code. It can be set from 10 to 60 seconds.

Response Connection Code

Section [005]: Option [7]

Default: Disabled

When enabled, the person using a Response Connection must press * on their phone to start the connection. If it is disabled, no key is required to activate the connection.

 If option [7] of section [005] is disabled, the person connecting must interact with the system within the Response Connection Code Entry Delay set in section [033] or the system will hang up to liberate the line.

Call Back Connection

Section [005]: Option [8]

Default: Enabled


When enabled, the monitoring station can call back the Listen-In module for the period of time indicated in the Call Back Connection Delay (section [028]) after receiving an event that enables the connection from the control panel. (See *Connection Options* and Table)

Call Back Connection Delay

Section [028]

Default: 005

Time allowed to the monitoring station to call back the Listen-In module to initiate a Call Back Connection. This can be set between 1 and 30 minutes.

 The Call Back Connection Delay is also used for the response connection. If the monitoring station fails to connect through a response connection to the Listen-In module under the value set in section [028], the response connection and call back connection will be disabled until the next event that causes a connection as defined in *Connection Options*.

Call Back Connection Code Entry Delay

Section [034]

Default: 020

This setting defines the time allowed to enter the Call Back Connection Access Code. It can be set from 20 to 60 seconds.

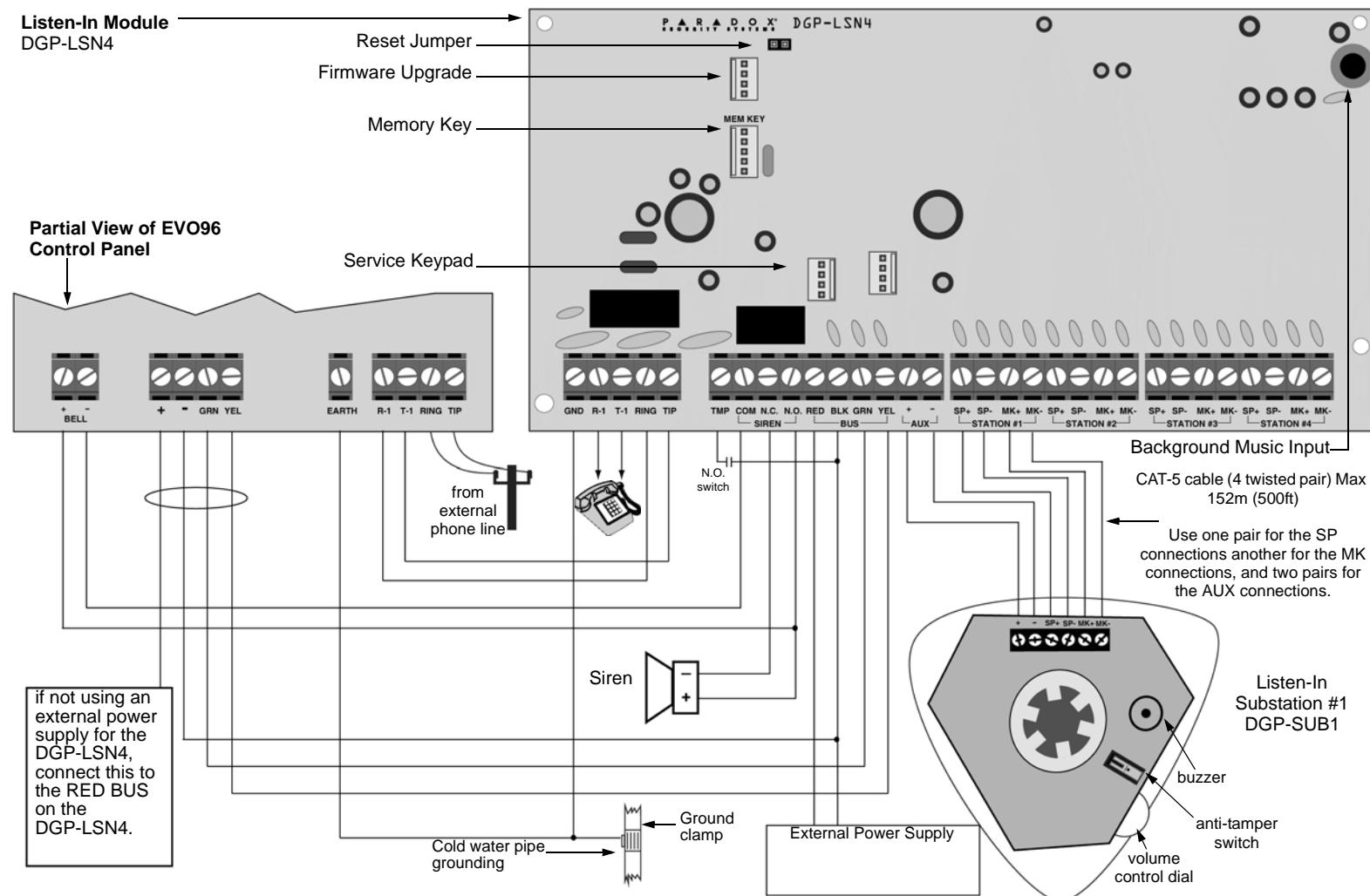
Call Back Connection Access Code

Section [037]

Default: 000000

Access code used to access the Listen-In Module when using the Call Back Connection. Normally used by the monitoring station.

Figure 2




Ring Counter


Section [025]

Default: 006

The Ring Counter represents the number of rings the Listen-in module will wait before picking up the line. If the line is not answered after the number of programmed rings, the Listen-in module answers the call. If more than 10 seconds separate each ring, the Ring Counter resets.

 With Call Back connections, the Listen-In module will answer on the first ring.

Please note that the Listen-in module's Ring Counter must be lower than the control panel's ring counter, but more than the answering machine's ring counter.


 If you are trying to connect to the control panel with WinLoad by modem, the Listen-In module will answer and then transfer the call to the control panel after analyzing the modem carrier.

Answering Machine Override Delay

Section [026]

Default: 030

If an answering machine is connected on the same phone line as the Listen-In module, the Answering Machine Override Delay will have to be programmed. This will allow the user to first call the system, let it ring between one and three times, then wait 10 seconds to skip over the Ring Counter reset delay and then call back within the programmed delay to have the system answer on the first ring. Default delay is 30 seconds, but it can be programmed between 000 and 255 seconds.

 *Even if the Answering Machine Override Delay can be set lower than 10 seconds, it needs to be above 10 seconds to work in conjunction with the Ring Counter's 10 second reset delay. Also, you will need to disable the control panel's answering machine override.*

User Connection Access

Section [024]

Default: 001

This option allows a user to access Listen-In and Two-Way communications. By default, only the Master can access this functionality of the Listen-In module (Levels 0, 2 and 3 or the Listen-In menu, refer to the DGP-LSN4 User Guide). All users can access level 8 or the Arm/Disarm menu, but only the users that have been programmed by the installer are able to access levels 0, 2 and 3 or the Listen-In menu. The installer can program the Listen-In module to allow the first 255 users of your system access to Levels 0, 2 and 3 or the Listen-In menu.

For example, if the installer enters 005 in section [024], Users 1, 2, 3, 4 and 5 will be able to access all of the Levels (0, 2, 3 and 8 or the Listen-In menu and Arm/Disarm menu). The installer can also program the Listen-In module to allow all users access to all of the Levels or menus by entering 000 in section [024].

Phoneline Menu Selection

Section [006]: Options [6] to [8]

Default: [6] Disabled [7] Enabled [8] Enabled

Option [6] controls the menu the user will have access to when connected to the system. Disable to select the User menu or enable to select the Monitoring menu. Option [7] controls the menu the monitoring station will hear when connected to the system. Disable to select the User menu, or enable to select the Monitoring menu. Option [8] decides which menu users will access by default. Disable to select the Arm/Disarm menu or enable to select the Listen-In menu. Refer to the DGP-LSN4 user guide to see the various menus.